## CDC and Partners Celebrate One Year Anniversary of STRIVE Vaccine Trial in Sierra Leone June 16, 2016

A year ago, in the midst of the largest Ebola epidemic the world has ever seen, the Sierra Leone Trial to Introduce a Vaccine against Ebola (STRIVE), a clinical trial of the investigational rVSV-ZEBOV vaccine was launched in Sierra Leone. The Trial was sponsored by the U.S. Centers for Disease Control and Prevention (CDC) and key collaborators were the College of Medicine and Allied Health Sciences (COMAHS), University of Sierra Leone and the Sierra Leone Ministry of Health and Sanitation (MoHS). These partners worked quickly to launch the trial and provide hope for preventing future outbreaks.

STRIVE focused on health facility and other frontline Ebola response workers including ambulance and surveillance teams, swabbers, and burial workers. The study took place in seven chiefdoms in the following five districts across Sierra Leone: Western Area Urban, Western Area Rural, Bombali, Port Loko, and Tonkolili. The first vaccination site opened in April and by June 18, 2015 seven vaccination sites were open in Sierra Leone with more than 8,600 participants enrolled. Vaccination was completed on December 12, 2015 with over 8,000 participants vaccinated.

The clinical trial included two sub-studies examining immunity to Ebola Virus Diseases and potential reactions to the vaccine. Testing blood samples of people who were vaccinated will give researchers a better understanding of whether participants' immune systems are responding to the vaccine and making antibodies to protect against Ebola. Blood samples were tested before people received the vaccine, one month, six months, and one year after vaccination. The second sub-study included closely monitoring a group of STRIVE participants for any reactions to the vaccine in order to study vaccine safety in detail.

An added benefit of launching STRIVE was strengthening existing infrastructure and expanding research capacity in Sierra Leone. Around 400 local study staff were hired, sites were built and renovated and new equipment and technology were provided for enrollment and vaccinations, data management, storing and handling vaccine under challenging temperature conditions (- 80 °C) and a clinical laboratory.

In preparation for the vaccine trial, STRIVE leaders engaged and informed study participants and leaders at the national, district, and community levels. Researchers wanted to ensure people had the information they needed to decide whether or not to participate in the voluntary trial. By engaging community leaders, health, and pharmacy organizations, holding information sessions, and providing materials explaining the vaccine trial, STRIVE was able to successfully recruit more than 8,000 volunteers for the study.

Along with STRIVE, studies of the rVSV-ZEBOV vaccine continue to take place in other African countries, the United States, Canada, Asia, and Europe. These studies suggest the vaccine can produce an immune response which could help protect people from getting Ebola. A study in Guinea suggests that the rVSV-ZEBOV vaccine protects against Ebola, at least in the short term. Conducting these types of vaccine trials in Sierra Leone, Liberia, and Guinea provides hope for preventing future Ebola outbreaks from turning into epidemics and hope for providing protection to populations at high risk for exposure to Ebola such as healthcare and frontline response workers.